

ABSTRACT

The inventive system uses modular N+1 bulk power supplies to power a computer system. Thus, the individual BPSs may be replaced while the system is on-line. Each BPS is split into two halves, with each half being run by a separate power grid. This means that if one of the power grids goes down, the other grid fills the power. Thus, there are no switching times or latencies, the inventive power supply system keeps running. When both power grids are present, each power supply half in a BPS load shares 50/50. The two input AC power grids are each controlled separately via two power distribution control assemblies (PDCA). Each assembly can be separately configured for 3 phase wye, 3-phase delta or single phase inputs.